

March 03, 2021



U.S. Department  
of Transportation

East Building, PHH-30  
1200 New Jersey Avenue S.E.  
Washington, D.C. 20590

**Pipeline and Hazardous  
Materials Safety Administration**

DOT-SP 16536  
(SECOND REVISION)

**EXPIRATION DATE: 2025-02-28**

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: FIBA Technologies, Inc.  
Littleton, MA
2. PURPOSE AND LIMITATIONS:
  - a. This special permit authorizes the manufacture, mark, sale and use of specification DOT 3AA, 3AAX and DOT 3T cylinders using an alternative tensile test specimen for batch acceptance. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
  - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
  - c. In accordance with 49 CFR 107.107(a) party status may not be granted to a manufacturing permit. These packagings may be used in accordance with 49 CFR 173.22a.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.203(a) in that each shipping paper issued in connection with a shipment made under a special permit must bear the special permit number and §§ 178.37(k)(2)(i) and 178.45(j)(1) in that a

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cylinder tested using an alternative test method is not authorized, except as specified herein.

5. BASIS: This special permit is based on the application of FIBA Technologies, Inc. dated February 24, 2021, submitted in accordance with § 107.109.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Hazardous materials authorized for transportation in a specification DOT 3AA, 3AAX or 3T cylinder*	2.1, 2.2, and 2.3	As appropriate	N/A

\*Hazardous materials designated as forbidden in Column (9B) of the § 172.101 Hazardous Materials Table may not be offered for or transported aboard cargo aircraft under the terms of this special permit.

7. SAFETY CONTROL MEASURES:

a. PACKAGING: Prescribed packagings are specification DOT 3AA, 3AAX or DOT 3T cylinders conforming to all requirements of these specifications except that they may be tested using round proportional tensile test specimens, as defined in ISO 11120 standard, in lieu of the rectangular cross-section specimens required in the specifications.

(1) For DOT Specification 3AA and 3AAX cylinders, the following changes apply:

(i) § 178.37(k)\*\*\*

(1)\*\*\*

(2)\*\*\*

(i) Gauge length of 8 inches with a width of not over 1-1/2 inches, a gauge length of 2 inches with a width of not over 1-1/2

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inches, or a gauge length of at least 24 times the thickness with width not over 6 times thickness when the thickness of the cylinder wall is not over 3/16 inch or a machined round proportional test specimen in accordance with ISO 11120 standard.

\*\*\*\*\*

(ii) § 178.37(1)\*\*\*

*Acceptable results for physical, flattening and bend tests.* An acceptable result for physical and flattening tests is elongation of at least 20 percent for 2 inches of gauge length or at least 10 percent in other cases. Flattening is required, without cracking, to 6 times the wall thickness of the cylinder. An acceptable result for the alternative bend test is no crack when the cylinder is bent inward around the mandrel until the interior edges are not further apart than the diameter of the mandrel. Minimum elongation requirement for round tension test specimen is 16 percent.

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(2) For a DOT Specification 3T cylinder, the following changes apply:

(i) § 178.45(j)\*\*\*

(1)\*\*\*

Each tension specimen must have a gauge length of two inches with a width not exceeding one and one-half inches. Except for the grip ends, the specimen may not be flattened. The grip ends may be flattened to within one inch of each end of the reduced section or a machined round proportional test specimen in accordance ISO 11120 standard may be used.

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(ii) § 178.45(k)\*\*\*

(1)\*\*\*

(2)\*\*\*

The elongation must be at least 16 percent for a two-inch gage length. Minimum elongation requirement for the round tension test specimen is 14 percent.

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b. MARKING: Each cylinder must be plainly and durably marked "DOT-SP 16536" near the markings required in § 178.35(f).

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modification or change is made to the package and it is offered for transportation in conformance with this special permit and the HMR.

c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Special Permits and Approvals for a specific manufacturing facility.

e. A current copy of this special permit must be maintained at each facility where the packaging is

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manufactured under this special permit. It must be made available to a DOT representative upon request.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, and cargo aircraft only (see additional restrictions in paragraph 6).
10. MODAL REQUIREMENTS: None as a requirement of this special permit.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
  - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
  - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—"The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

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12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 Immediate notice of certain hazardous materials incidents, and 171.16 Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for William Schoonover  
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at [http://hazmat.dot.gov/sp\\_app/special\\_permits/spec\\_perm\\_index.htm](http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm) Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: TG